

REMARKS

Overview and claim amendments

Claim 1-6 and 8-10 are pending in the application. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6,704,083). Claims 1-3 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al.(US 6,704,083), in view of Liu et al.(US 6,476,896). Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,704,083), in view of Liu, Wiltshire (US 5,313,562) and Kim et al. (US 6,642,985). Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,704,083), in view of Liu, Wiltshire (US 5,313,562).

Applicants have amended claim 10 to more clearly identify a novel and non-obvious aspect of the present application. The amendment of claim 10 is supported by the specification, for example, at page 9, lines 11-16 and FIG. 9B.

Claim Rejections-35 U.S.C §102

The Examiner rejected claim 10 under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6,704,083). This rejection is respectfully traversed. Applicants respectfully submit that Kim et al. ('083) does not disclose, suggest or teach, *inter alia*, the following features recited by amended claim 10:

"four electrodes disposed on the first substrate and **at corners of each display cell**; the electrodes disposed such that a center area of each display cell is **prevented from being shielded by the electrodes**"
(emphasis added).

As the Examiner acknowledges in the Office Action, Kim et al. ('083) disclose a plurality of electrodes in each display cell (see figures 4-6). However, Applicants respectfully submit that Kim et al. ('083) fail to teach or suggest that the four electrodes are disposed at *corners of each display cell* such that a center area of each display cell is *prevented from being shielded by the electrodes*, therefore the open ratio will be increased. The electrodes disclosed by Kim et al. ('083) are not disposed at corners of each display cell and the center area of each display cell is shielded by the electrodes therefore reducing light transmittance and suffering from small open ratio and inadequate brightness as indicated in background of the application (page 3, lines 1-4).

It is therefore respectfully submitted that independent claim 10 is patentable over Kim et al. (US 6,704,083) and should be allowed by the Examiner.

Claim Rejections-35 U.S.C §103

The Examiner rejected independent claim 1 under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,704,083) in view of Liu et al. (US 6,476,896). This rejection is respectfully traversed. Applicants respectfully submit that neither Kim et al. (US 6,704,083) nor Liu et al. (US 6,476,896) discloses, suggests or teaches, *inter alia*, the following features recited by independent claim 1:

"a first electrode with a first end and two symmetric first lateral sides connecting with the first end, formed on the first substrate, wherein **the length of the first end is less than the length of the two symmetric first lateral sides**; and
a second electrode with a second end and two symmetric first lateral sides connecting with the second end, formed on the first substrate, wherein **the length of the second end is less than the length of the two symmetric**

first lateral sides connecting with the second ends, the first end facing the second end with a discharge gap therebetween" (emphasis added).

As the Examiner acknowledges in the Office Action, Kim et al. (US 6,704,083) fail to disclose the length of the first or second end is less than the length of the two symmetric first lateral sides. Liu et al. ('896) teach the shape of electrodes in which the length of the first or second end is less than the length of the two symmetric first lateral sides.

Applicants respectfully submit that the Examiner misinterprets the teachings of Liu et al. ('896). The objects disclosed by Liu et al. ('896) in figures 6(a)-6(h) having various shapes of the periodical configuration on the substrate are **wall-bump structures**. See, for example, column 3 lines 24-44 and column 5 lines 13-23 in Liu et al. ('896). Applicants can not understand if and how the electrodes of Kim et al. can be modified with **wall-bump structures** of Liu et al. With all due respect, the Examiner cannot and should not simply and randomly refer to different elements in the references in an attempt to show corresponding elements recited in the claims, without demonstrating if and how the element are combined in a structure corresponding to the structure recited in the claims.

The Examiner is reminded that the **wall-bump structures** of Liu et al. are not conductors. Non-conductive **wall-bump structures** cannot generate an axially symmetric electrical field to change the arrangement of the liquid crystal molecules, when an external voltage is applied between the first and the second electrodes as recited in Claim 1. "There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination." *In re Oetiker*, 977 F.2d 1443, 1447, 24 USPQ 2d 1443 (Fed. Cir. 1992). Since all the cited references, singly or combination thereof, do not teach or suggest that the length of the

first end is less than the length of the two symmetric first lateral sides and the length of the second end is less than the length of the two symmetric first lateral sides, it is therefore in Applicant's belief that independent claim 1 is patentable over Kim et al. ('083), in view of Liu et al. ('896), Wiltshire ('562) and Kim et al. ('985).

It is therefore respectfully submitted that independent claim 1 is patentable. Since claims 2-6 and 8-9 directly or indirectly depend from claim 1, claims 2-6 and 8-9 are patentable by virtue of their dependency from patentable claim 1.

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In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees, which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

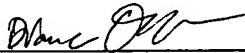
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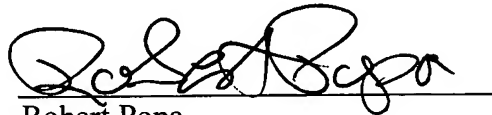


(Signature)

February 27, 2007

(Date)

Respectfully submitted,



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Encls:

A petition for a one-month extension of time and fee;

A Request for Continued Examination (RCE) and fee;

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